

MEMORANDUM

DATE: April 25, 2011
TO: Policy Committee
FROM: Luke Vinciguerra
SUBJECT: Submittal Requirements – Traffic Impact Analysis

I. Traffic Impact Analysis

A Traffic Impact Analysis (TIA) is a study which assesses the effects of a particular development's projected traffic on the transportation network. Submission of a TIA is required by the zoning ordinance during any legislative case that is expected to generate 100 or more weekday peak hour trips or be located on a road with a Level of Service (LOS) "D" or lower.

The ordinance does not currently define or provide any guidance to an applicant regarding the scope of work or expected results of a TIA. To increase predictability, staff recommends the creation of a policy document to define the required elements of a traffic study for legislative cases. Staff's recommendations regarding such a policy and its relationship to VDOT's TIA guidelines are outlined below.

II. Discussion Items

A. VDOT Chapter 527's applicability and proposed TIA policy

1. Description of Issue

- VDOT has adopted detailed guidelines stating how and when to submit a TIA independent of any local requirements. In general, VDOT requires submission of a TIA when a proposal is expected to generate 100 or more *residential* peak hour trips or 250 or more peak hour trips for any other use. This is not entirely consistent with the County's blanket 100 or more peak hour trip requirement. Additionally, the County requires submission of a TIA for proposals located on a road operating at a LOS "D" or lower.
- Chapter 527 guidelines includes scope of work requirements that do not necessarily require analyses often considered useful by staff in evaluating the impacts of a proposed development. More importantly, in many circumstances, Chapter 527 study areas are determined by preset distances from a proposed project. Preset study limits may cause the exclusion of intersections from a traffic study that are germane to a proposed project.
- Historically, the County has been generally supportive of projects that do not degrade surrounding streets and intersections below a LOS "C." Chapter 527 regulations require TIA's include recommended improvements to help mitigate the effects of the proposed development but lack clear thresholds detailing what the recommended improvements accomplish. A 527 compliant TIA's improvement recommendations may not be sufficient to mitigate new traffic generation to the County's satisfaction.

2. History

- As the zoning ordinance does not explicitly define a TIA, the Planning Director has historically determined the minimum scope of work for a proposed project where the applicant, VDOT and County staff agree on a study area. This has been of value as the Planning Director could require a scope of work that is specifically tailored to the road network in the study area (rather than having a specific standard such as analyzing all intersections within 1,000 feet of the project area).
- As stated in the Comprehensive Plan and demonstrated in the ordinance by the LOS "D"

trigger for a TIA, the County generally expects developments to maintain a LOS “C” along surrounding road segments at build out. However, in certain urban corridors the County has accepted traffic movements operating at less than a LOS “C” (i.e. Monticello, Richmond Road).

3. Comprehensive Plan GSAs, Public Input, Sustainability Audit, and PC and BOS Direction

- ED1.5-Continue to analyze County regulations, policies, and procedures to ensure that they do not unnecessarily inhibit commercial and industrial development.
- “Among other issues weighed in previous development proposals, the County is generally supportive of projects that do not degrade surrounding streets and intersections below a LOS “C.” (pg114)

4. Solutions and Policy Options

- Staff does not recommend changing the current zoning ordinance TIA trigger requirements to be consistent with Chapter 527 for the following reasons:
 - a) Developments that produce 100 or more trips as determined by the Institute of Transportation Engineers (ITE) but less than 250 vehicle trips would go through the SUP process without the benefit of a TIA. This would negate the point of having the 100 or more trigger as the County wouldn’t know the full effects of a proposed development; thus, the County would be unable to require conditions to mitigate any negative externalities.
 - b) Raising the commercial trigger to 250 or more peak hour trips may cause the Board to lose the ability to review traffic impacts and recommended improvements in certain cases and ultimately not be able to require a developer to mitigate the impacts of the new development. In the last ten years, three cases triggered legislative review based only on peak hour traffic generation (TGI Fridays – 122vph, Bay Lands Credit Union – 278vph and Chesapeake Bank at Lightfoot – 190vph).

There are many uses which generate less than 250 peak hour trips but more than 100 which can have significant impact on the road system. For example, a typical 2,000 square foot fast food restaurant with drive thru would have a substantial impact on adjoining roadways. Such facilities; however, may only generate 120 peak hour trips. In 1999, the Board reduced the trigger requirement from 150 peak hour trips to 100 trips as it was recognized that uses generating 100 or more peak hour trips can have a significant impact on the roadway network.

- To provide staff with the ability to require higher quality TIAs and provide applicants with clear and predictable submittal requirements, staff proposes a TIA policy document outlining general submittal requirements and expectations. This policy document would identify the following:
 - when a TIA is required
 - minimum expected scope of work
 - additional studies that may be requested by the Planning Director
 - improvements necessary to maintain a LOS “C” on roadways and/or intersections

The policy would be a County supplement to Chapter 527 regulations. Minimum scope of work would be the studies required in Chapter 527. Additional studies requested by the Planning Director could include corridor studies, queuing analyses, accident/safety analysis, an examination of transit etc. Most importantly, the policy would require an analysis of what improvements would be necessary to maintain a LOS “C” along the adjacent road segments.

The policy would require all TIA’s analyze the overall reduction in LOS the proposed

development would have on the adjacent road segments and intersections and clearly identify what road improvements (if any) would be needed to maintain a LOS “C”.

Recommendation

Staff recommends the Policy Committee endorse the concept of County specific TIA guidelines for legislative cases and maintaining the current TIA triggers in the Zoning Ordinance.

III. Conclusion

The ordinance does not define or provide any guidance to an applicant regarding the scope of work or expectations of a TIA. To increase predictability for applicants, staff recommends the creation of a policy document defining a traffic study for legislative cases. Staff recommends the Policy Committee endorse the concept a of policy document detailing the expectations of a TIA for legislative cases as described herein.